

# **Survey of Nurses 2014**

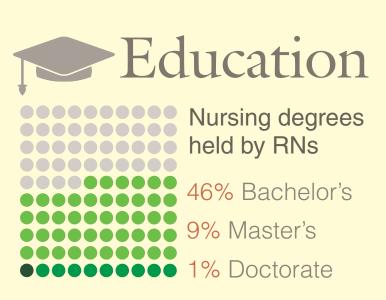




There are an estimated...

one hundred thous and seven hundred forty eight registered nurses active in michigan

seventeen thous and four hundred fifty three licensed practical nurses active in michigan



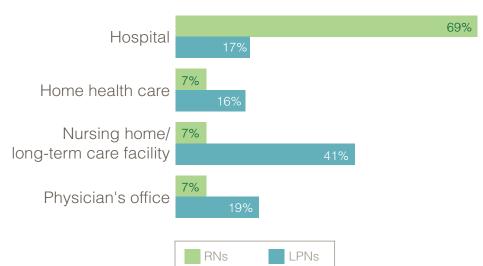
## INTERDISCIPLINARY **Team Participation**

in all core activities









## NURSES 55+

Percentage of **RNs** aged 55 and over

Percentage of **LPNs** aged 55 and over

## **WORK PLANS**

Plan to stop practicing within 10 years

41% RNs



Since 2004, the Michigan Center for Nursing has conducted an annual survey of Michigan nurses in conjunction with the licensure renewal process for purposes of workforce analysis and informing stakeholder discussions. To see the full 2014 nursing survey report go to www.michigancenterfornursing.org.



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#### INTRODUCTION

One of the goals of the Michigan Center for Nursing is to establish a central resource for nursing workforce data collection and analysis. The center conducts an annual survey of nurses licensed in Michigan to collect data on their employment status, geographic distribution, age, plans to continue practicing, work setting, practice area, specialty certification, education, gender, and race/ethnicity. In 2014, some of the response options pertaining to nurses' employment status were refined to more accurately pinpoint the number of hours per week respondents work in nursing or a related field, and a new question asked how many years they have been practicing as a nurse. This report presents the 2014 findings and a description of the methodology.

#### **METHODOLOGY**

The Michigan Center for Nursing (MCN) contracted with Public Sector Consultants Inc. (PSC) for development, implementation, and analysis of the survey of nurses. A single instrument for both registered nurses (RNs) and licensed practical nurses (LPNs) was designed in collaboration with the Michigan Center for Nursing and the Michigan Department of Community Health (MDCH) Office of Nursing Policy. (The response frequencies for RNs and LPNs are included in the appendices of this report, along with data from previous surveys as a reference.)

The samples for these surveys were drawn from the Michigan licensure files maintained by the Michigan Department of Licensing and Regulatory Affairs (LARA). All nurses are required to renew their license every two years. The universe of nurses is divided into two cohorts of roughly equal size, depending on the year in which each nurse was first licensed. The surveys were mailed to all nurses renewing their license in 2014 along with their license renewal notice. A total of 86,464 nurses (72,412 RNs and 14,052 LPNs) renewed their license. Respondents could either return the paper version of the survey to PSC or complete the survey online when they renewed their license. The large number of paper and Web-based surveys collected allows for a robust analysis. Combining the responses from the paper version with the results from the Web survey resulted in a total of:

- 17,141 completed RN surveys, yielding a margin of error of ±0.7 percent with 95 percent confidence; <sup>1</sup> and
- 2,445 completed LPN surveys, yielding a margin of error of ±1.9 percent with 95 percent confidence.

These totals include fully and partially completed surveys (that is, those with information missing for one or more variables); thus the sample size for individual variables will differ and the margin of error may change slightly depending upon the amount of data for that particular variable.

Historically, survey data show a difference between the two cohorts of nurses in age distribution. The cohort of nurses who renew their licenses in odd-numbered years is slightly older than the cohort who does so in even-numbered years. When looking at trends, survey responses that may be affected by age should be compared only to responses received from the *same* license renewal cohort in a previous survey.

The large number of responses received each year and the sampling design ensure that the survey findings apply to the entire population of nurses licensed in Michigan. If differences between survey findings from one year to another are significant (i.e., outside of the margin of error), they are noted in the text.

<sup>&</sup>lt;sup>1</sup> For example, if the answer to a survey question is 60 percent "Yes," the margin of error and confidence level mean that if this question were asked 100 times, in 95 occurrences the answer of the entire universe of respondents would be between 59.3 percent and 60.7 percent (i.e., the  $\pm$  0.7 percent margin of error). In the other five occurrences, the true answer from the universe would be either below or above this range (confidence interval).

#### NUMBER OF NURSES

The total number of nurses licensed by the state as of January 1, 2014 is 160,711. Of these, 136,045 are registered nurses (RNs) and 24,666 are licensed practical nurses (LPNs). For the first time since the 2004 survey, the number of nurses licensed by the state has *decreased*. Since January 1, 2013, the total number of licensed nurses decreased by 3.5 percent (5,762). Also for the first time, the number of licensed RNs decreased by 3,032 (about 2.2 percent). The number of licenses for LPNs continues to decrease, by almost 10 percent (2,730) during the same period.

In 2014, about 81 percent of licensed RNs report that they are active in nursing—working in nursing or a related area full- or part-time<sup>2</sup> (see Exhibit 1). About 74 percent of LPNs are working in nursing or a related area. The percentage of licensed RNs and LPNs who are active in nursing has decreased significantly since 2004 when 87 percent of RNs and 82 percent of LPNs were active in nursing. The percentage of nurses reporting they are retired "with no plans to return to work" is 8 percent for licensed RNs and almost 9 percent for LPNs, similar to recent years.

**EXHIBIT 1.** Employment Status of RNs and LPNs in Michigan, 2014

	RNs		LPNs	
	%	Number*	%	Number*
Total number of nurses licensed by Michigan		136,045		24,666
Total active nurses—employed in nursing or related area	81.2%	110,469	74.4%	18,352
Not employed, and seeking employment in nursing or related area	2.8	3,809	5.5	1,357
Employed, but not in nursing	2.5	3,401	4.2	1,036
Not employed, and seeking employment outside nursing	0.2	272	0.5	123
Temporarily not working and not looking for a job	5.3	7,210	6.8	1,677
Retired with no plans to return to work	8.0	10,884	8.6	2,121
Active nurses employed in Michigan (91.2 percent of active RNs, 95.1 percent of active LPNs)		100,748		17,453
Active nurses providing direct care services in Michigan (81.7 percent of active RNs employed in MI, 89.2 percent of active LPNs employed in MI)		82,311		15,568

SOURCE: Michigan Center for Nursing Survey of Nurses 2014.

\*NOTE: The number of nurses licensed by Michigan is from the Michigan licensure files maintained by the Michigan Department of Licensing and Regulatory Affairs as of January 1, 2014. All other numbers are estimated based on data from the *Michigan Center for Nursing Survey of Nurses 2014.* 

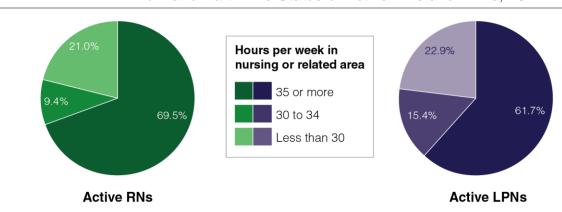
Some active nurses are not working in Michigan, even though they hold a Michigan license. And some nurses working in positions in related areas, such as nursing education or administration, do not provide direct care services to patients. The following estimates are based on survey findings for 2014.

- An estimated 100,748 RNs (about 91 percent of active RNs) are working in nursing or a related area *in Michigan*, compared to an estimated 103,317 RNs in 2013.
- An estimated 82,311 RNs (almost 82 percent of the active RNs working in Michigan) *provide direct* patient care services in their main nursing position, compared to an estimated 84,100 RNs in 2013.

<sup>&</sup>lt;sup>2</sup> Throughout this report, the term "active" is used to refer to nurses who are working either full-time or part-time in nursing or a related area. "Active" does not include the almost 3 percent of licensed RNs and 6 percent of LPNs who are unemployed and seeking nursing work and could be considered part of the available nursing workforce.

- An estimated 17,453 LPNs (about 95 percent of active LPNs) are working in nursing or a related area *in Michigan*, compared to an estimated 19,179 LPNs in 2013.
- An estimated 15,568 LPNs (about 89 percent of the active LPNs working in Michigan) *provide direct* patient care services in their main nursing position, compared to an estimated 18,019 LPNs in 2013.

Analysis of data in this report focuses on *active* nurses. In depth analysis of the data for these *active* nurses shows the distribution between full- and part-time status in Exhibit 2.



**EXHIBIT 2.** Full- and Part-Time Status of Active RNs and LPNs, 2014

SOURCE: Michigan Center for Nursing Survey of Nurses 2014.

#### RATIO OF NURSES TO POPULATION

Based on the employment location reported by nurses, the estimated ratio of active nurses to population in Michigan is 1,194 per 100,000.<sup>3</sup> This nurse-to-population ratio estimate includes *both* LPNs and RNs who are employed in nursing full-time or part-time in Michigan. The estimated ratio of active *registered nurses* to population in Michigan is 1,018 for every 100,000 people, compared to 1,141 RNs for every 100,000 people in 2013. The ratio of active *licensed practical nurses* to population is approximately 176 LPNs per 100,000 people, compared to 202 LPNs per 100,000 people in 2013.

#### **AGE OF NURSES**

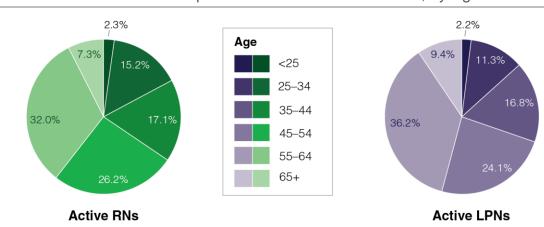
For several years the proportion of active licensed nurses nearing retirement age has increased for both RNs and LPNs in Michigan. In 2014, the proportion of nurses who are aged 55 and older is slightly higher than it was for the *same* license renewal cohort who responded to the survey in 2012.

- About 39 percent of *active* RNs in this license renewal cohort report that they are aged 55 or older (see Exhibit 3), compared to 34 percent in 2012.
  - Of these, about 7 percent of RNs are 65 years old or older, compared to 5 percent of RNs in the same license renewal cohort who responded to the survey in 2012.
- About 46 percent of *active* LPNs in this license renewal cohort are aged 55 or older, compared to 41 percent in 2012.

<sup>&</sup>lt;sup>3</sup> Nurse-to-population ratios for 2014 are calculated using the employment location reported by nurses and the U.S. Census Bureau annual population estimates for Michigan for 2013 (9,895,622). Prior to 2004, licensure surveys used the mailing address of licensed nurses to estimate the number of nurses active in Michigan and nurse-to-population ratios. Using this methodology, the nurse-to-population ratio for 1998–99 was 1,079 nurses per 100,000 people.

• Of these, about 9 percent of LPNs are 65 years old or older, compared to 7 percent in the same license renewal cohort who responded to the survey in 2012.

In 2014, the proportions of both registered nurses and licensed practical nurses who are under the age of 25 are essentially the same as they were in the same license renewal cohort in 2012 (about 2 percent of RNs and 2 percent of LPNs). In the survey responses for 2014, the average age of active RNs is 48.5 years and the average age of active LPNs is 50.9 years.



**EXHIBIT 3.** Proportion of Active RNs and LPNs, by Age

SOURCE: Michigan Center for Nursing Survey of Nurses 2014. NOTE: Percentages may add to more than 100 due to rounding.

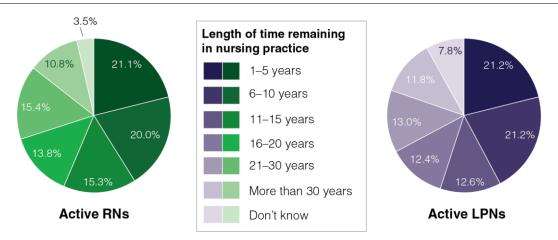
#### LENGTH OF TIME IN NURSING

In 2014, a question was added to the survey to find out how many years individuals have been practicing as a nurse. Data show similarities among RNs and LPNs. At least three-quarters of both, *active* RNs (about 80 percent) and LPNs (just over 74 percent), have been practicing as a nurse for 6 years or more. About 14 percent of *active* RNs and 18 percent of *active* LPNs said they have been practicing as a nurse for 3 years or less.

#### LENGTH OF TIME REMAINING IN NURSING

In the past 11 years, the length of time nurses planned to continue practicing paralleled with shifts in the age distribution of nurses. However, it is not just the nurses nearing retirement who are planning to stop practicing nursing in the near future. As shown in Exhibit 4, about 41 percent of all *active* RNs say they plan to practice nursing for only one to ten more years, compared to 40 percent of RNs in the *same* license renewal cohort in 2012; while just 39 percent are aged 55 or older (compared to 34 percent in 2012). Among active LPNs, about 42 percent say they plan to practice nursing for only one to ten more years; a slightly higher percentage (about 46 percent) report they are aged 55 or older.

**EXHIBIT 4.** Plans to Practice Nursing for Active RNs and LPNs, 2014



#### CHANGES IN EMPLOYMENT

In 2013, survey questions regarding changes in the employment of nurses were revised. Rather than looking at changes in nursing positions to a different organization or changes within the same organization, the questions examined changes in employment between inpatient and outpatient positions and primary care and specialty positions. The responses in 2014 are similar to those in 2013.

- 5 percent of active RNs (an estimated 5,523<sup>4</sup>) changed from an inpatient position to an outpatient position, while almost 2 percent (2,209) did the opposite. Similar migration occurred with LPNs—about 3 percent of LPNs (an estimated 551) changed from an inpatient position to an outpatient position, while about 1 percent (184) did the opposite.
- About 2 percent of active RNs (an estimated 2,209) changed from a primary care position (i.e., family practice, general medicine, internal medicine, or general pediatrics) to a specialty care position, while about 1 percent (1,105) did the opposite. Similarly, 3 percent of LPNs (an estimated 551) changed from a primary care position to a specialty care position, while almost 2 percent (367) did the opposite.
- About 22 percent of both RNs and LPNs said they made some other employment change within the past three years.

#### **EMPLOYMENT SETTING**

In 2014, almost 69 percent of active RNs are employed in either a hospital inpatient or outpatient setting (see Exhibit 5), which is similar to the percentages in 2012 and 2013 (70 percent). In contrast, only about 17 percent of active LPNs are employed in a hospital setting. Almost 41 percent of LPNs are employed in a nursing home or long-term care facility, compared to about 34 percent in 2013 and 43 percent in 2012.

<sup>&</sup>lt;sup>4</sup> The estimates for the number of nurses who made a change in employment in the last three years were calculated using the estimated number of active nurses. Since survey respondents were asked to "mark all that apply," a nurse may be counted in more than one estimate.

**EXHIBIT 5.** Employment Setting of Active RNs and LPNs, 2014

Employment Settings	RNs	LPNs
Hospital inpatient	51.9%	10.8%
Hospital outpatient	16.6	5.9
Home health care	7.1	15.6
Nursing home/long-term care facility	6.9	40.7
Physician's office	6.9	19.0
Nursing education	4.9	1.6
Nonhospital outpatient	4.8	3.2
Public/community health	3.5	1.9
Hospice	3.3	3.6
Insurance company/health plan	2.8	1.2
Federally qualified health center	1.3	1.9
Elementary or secondary school health	1.0	1.0
Nurse-managed clinic	0.9	0.8
Traveling/staffing agency	0.7	0.7
Correctional system	0.7	1.6
College health center	0.2	0.2
Retail clinic	0.1	0.2
Other	7.9	7.8
None (not active in nursing)	0.1	0.2

NOTE: Nurses were asked to indicate all of their current employment settings, so the sum of the percentages will be more than 100 percent. "Federally qualified health center," "correctional system," "nurse-managed clinic," and "retail clinic" were added as settings in the 2011 survey. Also in 2011, "school health" was separated into two setting options: "elementary or secondary school health" and "college health center."

#### PRACTICE AREA

Almost 82 percent of active RNs and 89 percent of active LPNs report that their main nursing position involves providing direct care services to patients/families. These nurses were asked to identify their main practice area from a list of areas given (see Exhibit 6). The practice areas that RNs identify most often are "medical-surgical" (about 14 percent), primary care (i.e., "general/family practice," "internal medicine," and "pediatrics") (almost 9 percent), and "perioperative" (about 8 percent). LPNs who provide direct care most often identified their main practice area as "geriatrics/elderly care" (almost 43 percent).

**EXHIBIT 6.** Main Practice Area of Active RNs and LPNs Who Provide Direct Patient Care, 2014

Main Practice Area	RNs	LPNs
Medical-surgical	14.4%	5.8%
Perioperative	8.2	0.7
Critical care	7.4	0.9
Emergency/urgent care	6.8	0.8
Geriatrics/elderly care	6.8	42.6
Cardiology/cardiac care	5.9	1.3

Main Practice Area	RNs	LPNs
Obstetrics	5.7%	2.3%
Pediatrics	4.7	6.7
Case management	4.2	0.9
Psychiatric/mental health	3.6	2.7
Oncology	3.3	0.5
Hospice/palliative care	2.7	2.1
Rehabilitation	2.7	4.3
Neonatal	2.5	0.1
General/family practice	2.4	8.8
Endoscopy/diagnostic testing	1.6	0.8
Patient education	1.6	1.3
Internal medicine	1.5	2.4
Dialysis/hemodialysis	1.4	0.3
Women's health	1.3	1.3
Anesthesia	1.5	0.0
Other	9.7	13.4

#### INTERDISCIPLINARY PATIENT CARE TEAMS

The Institute of Medicine (IOM) defines an interdisciplinary team (also referred to as "interprofessional team" by other sources) as one that includes at least two different types of health providers who work collaboratively with patients and their caregivers—to the extent preferred by each patient—to accomplish shared goals within and across settings to achieve coordinated, high-quality care.<sup>5</sup> In 2013, questions were added to the nurse survey to obtain information on how many nurses are members of an interdisciplinary patient care team and to determine their role on the team.

About 64 percent of RNs and almost 53 percent of LPNs report being a member of an interdisciplinary patient care team, a slightly lower percentage than nurses in 2013 (68 percent of RNs and 55 percent of LPNs). Core activities of an interdisciplinary team, based on the IOM core principles and description of team processes<sup>6</sup>, include:

- discussing the roles and responsibilities of each team member;
- conducting "huddles" or clinical discussions with the team;
- conducting patient rounds with other members of the team;
- holding team meetings with patients and their families;
- developing shared goals that are reflective of the patient's priorities and supported by all team members;
- communicating with other team members virtually using text, e-mail, and/or electronic health records; and
- continuously evaluating team processes and patient outcomes.

For those nurses who report participating in core activities of an interdisciplinary patient care team, the activities reported most often are "clinical discussions or huddles with the patient care team" (almost 66

<sup>&</sup>lt;sup>5</sup> P. Mitchell, *Core Principles & Values of Effective Team-based Health Care.* Discussion Paper, Institute of Medicine, Washington, D.C., 2012. Available: www.iom.edu/global/perspectives/2012/teambasedcare.aspx (accessed 9-17-13).

<sup>6</sup> Ibid.

percent of RNs and 48 percent of LPNs) and "development of shared goals reflective of patient priorities and supported by all team members" (almost 59 percent of RNs and 50 percent of LPNs). (See Exhibit 7.) Only 14 percent of RNs and 9 percent of LPNs report participating in *all* core activities of an interdisciplinary patient care team.

**EXHIBIT 7.** Percentage of Nurses Participating in Core Activities of an Interdisciplinary Team, 2014

Functions of an interdisciplinary team:	RNs	LPNs
Clinical discussions or "huddles" with the patient care team	66%	48%
Development of shared goals reflective of patient priorities and supported by all team members	59	50
Discussion of team members' roles and responsibilities	54	47
Evaluation of team processes and patient health outcomes	54	41
Virtual communication with other team members through an electronic health record, email, or text message	50	38
Patient rounds with other members of the patient care team	42	36
Team meetings with patients and their families	35	37
Participation in all interdisciplinary team core activities	14%	9%

SOURCE: Michigan Center for Nursing Survey of Nurses 2014 and Core Principles & Values of Effective Team-based Health Care, Institute of Medicine, 2012.

NOTE: Percentages equal more than 100 percent because respondents were asked to "Mark all that apply."

PSC conducted a crosstab analysis of survey data to look at how many nurses within each work setting and main practice area said they are a member of an interdisciplinary patient care team in their current position. Registered nurses who report working in a hospice/palliative care, federally qualified health center, home health care, or nursing home/long-term care facility setting are more likely to be a member of an interdisciplinary patient care team than RNs working in other settings (see Exhibit 8). Registered nurses who identify their main practice area as hospice/palliative care, psychiatric/mental health, case management, dialysis/hemodialysis, or rehabilitation are more likely to report being a member of an interdisciplinary patient care team. When PSC analyzed data for LPNs by work settings and practice area, the samples were too small to draw conclusions about participation in teams.

**EXHIBIT 8.** Work Settings and Practice Areas with the Highest Percentages of RNs Reporting Participation in an Interdisciplinary Patient Care Team

Work Settings	
Hospice	90%
Federally qualified health center	80
Home health care	78
Nursing home/long-term care facility	75
Nurse-managed clinic	70
Hospital inpatient	68
Nonhospital outpatient	67
Traveling/staffing agency	66
Hospital outpatient	64
Correctional system	63
Public/community health	60
Physician's office	57

Main Practice Areas	
Hospice/palliative care	92%
Psychiatric/mental health	87
Case management	87
Dialysis/hemodialysis	85
Rehabilitation	81
Critical care	74
Oncology	74
Neonatal	72
Geriatrics/elderly care	71
Medical-surgical	68
Patient education	67
Cardiology/cardiac care	67
General/family practice	66

#### **SPECIALTY CERTIFICATION**

Since 2011, the nurse licensure survey has asked registered nurses (RNs) to provide information on any specialty certification they may hold, and on average, how many hours per week they provide direct patient care as an advanced practice nurse. In 2013, additional questions were included to learn more about this population of nurses and find out how many hold a DEA and/or NPI number. A Drug Enforcement Agency (DEA) number authorizes the holder to prescribe medications to patients. A National Provider Identifier (NPI) number, allows the holder to submit claims for reimbursement for services they provide to patients.

In 2014, almost 4 percent of all *active* registered nurses report holding a specialty certification as a nurse practitioner; 1 percent as a nurse anesthetist; and less than half of one percent as a nurse midwife. Among registered nurses who hold specialty certification, more than half (almost 56 percent) provide direct patient care as an advanced practice registered nurse (APRN) for more than 35 hours per week (that is, full-time). About 8 percent of APRNs do not provide any direct patient care.

Questions regarding how many APRNs hold a DEA and/or NPI number were asked only on the online survey because of space limitations on the hard copy survey. Of the active APRNs responding to the online survey in 2014, about 56 percent said they currently have a DEA number, and almost 83 percent hold an NPI number.

#### **EDUCATION**

All nurses responding to the survey were asked to indicate their level of education (all degrees completed). Nurses may hold more than one nursing degree, so percentages total more than 100.

- Almost 42 percent of active RNs have an associate's degree in nursing and 16 percent have an RN diploma in nursing.
- Almost 46 percent hold a bachelor's degree in nursing.
- Almost 9 percent of active RNs hold a master's degree in nursing and almost 5 percent hold a master's degree in another field.

- Almost 1 percent of RNs hold a doctorate in nursing. Among those with a doctorate:
  - More than half (almost 54 percent) have a Doctor of Philosophy degree (PhD), compared to 57 percent in 2013 and 71 percent in 2012
  - Almost 45 percent have a Doctor of Nursing Practice degree (DNP), compared to 39 percent in 2013 and 24 percent in 2012
  - Almost 1 percent have a Doctor of Nursing degree (ND), similar to previous years of survey data
  - No nurses report having a Doctor of Nursing Science degree (DNSc), compared to 1 percent in 2013 and 4 percent in 2012
- Almost 97 percent of active LPNs have an LPN diploma or an LPN certificate of nursing.
- About 8 percent of RNs and 9 percent of LPNs report they hold some other degree.

Beginning in 2009, nurses were asked whether they are currently enrolled in a bachelor's, master's, or doctorate degree program.

- 6 percent of RNs and about 2 percent of LPNs responding to the survey in 2014 are enrolled in a Bachelor of Science in Nursing (BSN) program.
- About 3 percent of RNs are enrolled in a Master of Science in Nursing (MSN) program. More than half (60 percent) of the nurses enrolled in an MSN program are enrolled in a program designed to prepare them for specialty certification as a nurse practitioner.
- Almost 1 percent of RNs are currently enrolled in a Doctor of Nursing Practice (DNP) program.
- Less than one half of a percent of RNs are enrolled in a Doctor of Philosophy in Nursing (PhD) program.

#### **RACE/ETHNICITY AND GENDER**

Data on race/ethnicity and gender of the nursing population in Michigan show that:

- Almost 7 percent of active RNs and 6 percent of active LPNs are male.
- About 89 percent of active RNs are white, almost 5 percent are African American, 3 percent are Asian, 1 percent are American Indian/Alaskan Native, and less than 1 percent are either Middle Eastern or Pacific Islander.
- About 80 percent of active LPNs are white, about 13 percent are African American, about 2 percent are Asian, almost 2 percent are American Indian/Alaskan Native, and less than 1 percent are Pacific Islander.
- Almost 2 percent of both active RNs and LPNs are Spanish/Hispanic/Latino.

### **Appendix A:**

## RN Response Frequencies 2004–2014<sup>1,2</sup>

For 2014 survey results, N=17,141

All nurses are required to renew their license every two years after receiving their first license, which results in two approximately equal cohorts of nurses. The cohort of nurses who renew their licenses in odd-numbered years is slightly older than the cohort who renew their licenses in even-numbered years. When looking at trends, survey responses that may be affected by age should be compared only to responses received from the *same* license renewal cohort in a previous survey. The following frequencies present the responses to survey questions given by RNs.

1. Are you a licensed practical nurse (LPN), a registered nurse (RN), or both? (Mark **one**. If you are both an LPN and an RN, complete and return only one survey.)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
RN only	96.4%	95.8%	96.6%	96.4%	96.9%	96.8%	96.9%	97.5%	97.7%	97.5%
Both LPN and RN	3.6	4.2	3.4	3.6	3.1	3.2	3.1	2.5	2.3	2.5

NOTE: This question was not asked on the 2004 survey.

2. Do you hold a Michigan specialty certification as a...

		Active R	Ns Only	
	2011	2012	2013	2014
a) Nurse anesthetist	1.6%	1.1%	1.2%	1.0%
b) Nurse midwife	0.3	0.3	0.3	0.2
c) Nurse practitioner	2.9	3.3	3.5	3.5

NOTE: This question was added on the 2011 survey.

<sup>&</sup>lt;sup>1</sup> Data for 2004–2014 are from the annual Michigan Center for Nursing Survey of Nurses.

<sup>&</sup>lt;sup>2</sup> Frequencies reported may not equal 100 percent due to rounding.

If you are practicing as an advanced practice registered nurse, do you have a Drug Enforcement Agency (DEA) number?

	Active AF	Active APRNs Only		
	<b>2013</b> (n=510)	<b>2014</b> (n=422)		
a) Yes	54.3%	56.4%		
b) No	45.7	43.6		

If you are practicing as an advanced practice registered nurse, do you have a National Provider Identifier (NPI) number?

	Active APRNs Only		
	<b>2013</b> (n=506)	<b>2014</b> (n=420)	
a) Yes	82.0%	82.9%	
b) No	18.0	17.1	

3. If you hold a specialty certification listed above, on average, how many hours per week do you provide direct patient care as an advanced practice registered nurse?

	Active APRNs Only								
	<b>2011</b> (n= 1,263)	<b>2012</b> (n=695)	<b>2013</b> (n=735)	<b>2014</b> (n=622)					
a) Less than 10 hours per week	4.7%	5.9%	5.3%	6.9%					
b) 10–15 hours per week	3.1	5.0	4.8	3.5					
c) 16–25 hours per week	11.5	10.6	11.0	10.9					
d) 26–35 hours per week	14.3	12.7	14.7	14.6					
e) More than 35 hours per week	60.5	56.5	55.2	55.9					
f) I am practicing as an APRN, but with no time in direct patient care	1.5	2.9	3.0	2.4					
g) I am not currently practicing as an APRN	4.4	6.3	6.0	5.6					

NOTE: This question was added on the 2011 survey.

#### 4. What is your education background? (Mark **all** that apply.)

		Active Only										
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
a) LPN diploma/ certificate of nursing		3.7%	5.5%	5.8%	5.6%	4.6%	4.6%	4.7%	3.8%	3.6%	3.2%	
LPN certificate of achievement	_	1.9	_	_	_	_	_	_	_	_	_	
b) RN diploma in nursing	_	22.3	18.7	21.9	22.0	20.1	19.3	19.3	16.9	16.6	15.5	
c) Associate's degree in nursing	42.1%	44.4	48.4	45.8	45.5	44.4	45.1	44.4	41.8	41.6	41.5	
d) Bachelor's degree in nursing	40.3	37.4	37.0	38.0	38.6	39.1	39.3	40.4	44.1	44.1	45.6	
e) Master's degree in nursing	8.4	7.4	6.4	6.8	7.0	7.3	7.5	7.6	8.5	9.4	8.8	
f) Master's degree in other field	-	_	3.9	4.4	4.7	4.7	4.6	4.6	4.9	4.7	4.7	
g) Doctorate in nursing	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.7	0.8	
h) Doctorate in other field		_	_	_	0.4	0.4	0.4	0.5	0.5	0.4	0.4	
i) Other degree	9.4	10.6	8.0	8.8	8.9	7.6	7.9	7.5	8.1	7.9	7.6	

NOTE: In 2004, 21.8% of all RNs reported they held a diploma in nursing. On the 2005 survey, "Diploma in nursing" was replaced as a response option by "LPN diploma in nursing," "LPN certificate of achievement," and "RN diploma in nursing." On the 2006 and 2007 survey, "LPN diploma in nursing" and "LPN certificate of achievement" were combined as one response option.

5. If you have a doctorate in nursing, please indicate the type of doctorate degree. (Mark all that apply.)

		Active Only										
	2009	2010	2011	2012	2013	2014						
a) Doctor of Nursing (ND)	3.2%	2.7%	3.0%	2.2%	1.9%	0.9%						
b) Doctor of Nursing Practice (DNP)	19.0	16.8	26.5	23.9	38.9	44.5						
c) Doctor of Nursing Science (DNSc)	4.0	5.3	3.0	4.3	0.9	0.0						
d) Doctor of Philosophy (PhD)	73.0	77.0	66.7	70.7	57.4	53.6						

6. Are you currently enrolled in a program to obtain a Bachelor of Science in Nursing (BSN), Master of Science in Nursing (MSN), Doctor of Nursing Practice (DNP), or Doctor of Philosophy in Nursing (PhD)? (Mark **all** that apply.)

	Active Only									
<u></u>	2009	2010	2011	2012	2013	2014				
a) Bachelor of Science in Nursing (BSN)	4.1%	4.0%	4.5%	5.5%	6.6%	6.0%				
b) Master of Science in Nursing (MSN)	2.7	2.6	2.8	2.9	3.2	3.1				
c) Doctor of Nursing Practice (DNP)	_	_	0.3	0.5	0.5	0.7				
d) Doctor of Philosophy in Nursing (PhD)	_	<u> </u>	0.2	0.1	0.1	0.1				

NOTE: This question was consolidated, and "Doctor of Nursing Practice" and "Doctor of Philosophy in Nursing" were added as choices in the 2011 survey. Data from previous surveys have been consolidated in the same way so the trend can be viewed.

7. If you are enrolled in a program to obtain an MSN, is the program designed to prepare you for specialty certification as a Nurse Practitioner?

	Active C	Only
	2013	2014
a) Yes	52.2%	60.0%
b) No	47.8	40.0

#### 8. What is your current employment status? (Mark **one**.)

		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
a)	35 or more hours per week in nursing or related area	62.3%	60.2%	61.6%	60.6%	60.8%	59.7%	59.3%	59.0%	60.2%	58.4%	56.4%
b)	30 to 34 hours per week in nursing or related area	_	_	_	_	_	_	_	_	_	-	7.7
c)	Less than 30 hours per week in nursing or related area	-	-	-	-	-	-	-	-	-	-	17.1
	Less than 35 hours per week in nursing or related area	24.5	24.9	23.0	24.2	23.4	23.4	22.9	22.6	22.6	22.7	_
d)	Employed, but not in nursing	3.1	2.9	3.3	2.7	2.7	2.6	2.6	2.4	2.6	2.5	2.5
e)	Not employed, and seeking employment in nursing or related area	1.8	1.7	1.8	1.6	1.7	2.2	2.6	2.4	2.5	2.6	2.8
f)	Not employed, and seeking employment outside of nursing	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2
g)	Temporarily not working and not looking for a job	4.3	4.9	5.1	4.8	4.6	5.1	4.9	5.2	4.8	5.2	5.3
h)	Retired or with no plans to return to work	3.7	5.1	4.9	6.0	6.6	6.8	7.5	8.3	7.2	8.4	8.0

#### 9. Identify your current employment setting(s). (Mark **all** that apply.)

			Active Only											
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		
a)	Hospital inpatient	50.2%	57.7%	58.9%	57.5%	56.5%	56.5%	54.3%	55.5%	54.3%	53.2%	51.9%		
b)	Hospital outpatient	13.7	15.9	14.6	16.1	16.2	16.4	16.3	16.4	16.1	16.9	16.6		
,	Nonhospital outpatient	2.6	3.7	3.8	3.8	4.3	4.1	4.7	4.3	4.5	4.7	4.8		
d)	Physician's office	5.4	6.9	6.4	6.6	6.5	6.5	6.7	6.1	6.4	6.5	6.9		
	Federally qualified health center	-	-	-	-	-	-	-	1.2	1.3	1.3	1.3		
f)	Retail clinic	-	_	-	_	_	_	_	0.2	0.1	0.1	0.1		

			Active Only									
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
g)	Nurse-managed clinic	-	_	-	-	_	_	-	0.7%	0.8%	0.8%	0.9%
h)	Correctional system	_	-	_	_	_	-	-	1.0	0.6	0.7	0.7
i)	Nursing home/long- term care facility	5.6%	7.2%	7.1%	6.8%	6.8%	6.8%	7.5%	7.4	6.9	6.8	6.9
j)	Home health care	5.1	6.8	7.3	6.9	6.9	7.0	7.8	7.6	7.0	7.1	7.1
k)	Hospice	2.2	2.3	2.6	2.7	2.7	2.9	2.9	3.0	3.0	3.2	3.3
I)	Public/community health	3.6	3.9	3.6	3.9	3.8	3.8	2.6	3.3	3.4	3.5	3.5
	School health	1.1	1.3	1.2	1.3	1.2	1.1	1.2	-	-	-	_
m)	Elementary or secondary school health	-	-	-	-	-	-	-	0.9	1.1	0.9	1.0
n)	College health center	-	-	-	-	-	-	-	0.3	0.2	0.4	0.2
0)	Nursing education	4.7	4.7	4.3	4.9	4.9	4.8	4.7	4.4	4.8	5.1	4.9
p)	Insurance company/health plan	1.9	1.9	1.9	2.0	2.2	2.2	2.2	2.1	2.6	2.4	2.8
q)	Traveling/staffing agency	2.6	2.3	2.8	1.8	1.7	1.3	0.9	0.8	0.8	0.7	0.7
r)	Other	7.4	8.6	8.4	8.2	9.0	8.1	8.5	6.7	7.5	7.5	7.9
s)	None (not active in nursing)	4.7	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1

NOTE: Nurses were asked to indicate all of their current employment settings, so the sum of the percentages will be more than 100 percent. "Federally qualified health center," "Correctional system," "Nurse-managed clinic," and "Retail clinic" were added as settings in the 2011 survey. Also in 2011, "School health" was separated into two setting options: "Elementary or secondary school health" and "College health center."

10. Does your main nursing position involve providing direct care services to patients/families?

			Active only												
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014				
a) Yes	82.6%	85.1%	85.7%	84.5%	83.3%	83.1%	82.6%	82.9%	81.6%	81.4%	81.7%				
b) No	17.4	14.9	14.3	15.5	16.7	16.9	17.4	17.1	18.4	18.6	18.3				

11. If you provide direct care services, please identify your main practice area. (Mark one.)

			Active only										
		2004	2005 a	2006	2007	2008	2009	2010 <sup>b</sup>	2011°	2012	2013	2014	
a)	Anesthesia	-	_	_	_	_	_	2.7%	2.6%	1.9%	1.8%	1.5%	
b)	Cardiology/cardiac care	_	_	_	_	_	_	7.6	7.0	7.8	7.2	5.9	
c)	Case management	5.1%	7.7%	11.8%	3.8%	3.6%	6.3%	3.9	3.6	3.9	5.1	4.2	
d)	Critical care	15.2	14.2	14.9	12.9	12.4	12.8	9.1	8.7	9.4	9.0	7.4	
e)	Dialysis/hemodialysis	-	-	-	-	-	-	1.6	1.5	1.7	1.7	1.4	
f)	Emergency/urgent care	9.2	7.4	7.8	7.1	7.3	7.1	7.3	6.7	7.4	7.1	6.8	
g)	Endoscopy/diagnostic testing	-	-	-	-	-	-	1.8	1.9	1.8	1.9	1.6	
h)	General/family practice	3.3	2.0	1.2	2.5	2.4	2.7	3.1	2.1	2.1	2.3	2.4	
i)	Geriatrics/elderly care	-	7.2	7.1	7.1	7.3	6.5	7.5	7.3	7.8	7.5	6.8	
j)	Hospice/palliative care	_	_	_	_	_	_	2.5	2.5	2.6	3.1	2.7	
k)	Internal medicine	-	_	-	-	-	-	_	1.3	1.8	1.5	1.5	
l)	Medical-surgical**	17.9	16.0	17.5	17.2	17.6	15.5	15.0	14.8	3.0	2.4	14.4	
m)	Neonatal	-	-	-	-	-	-	2.5	2.0	2.8	2.5	2.5	
n)	Obstetrics	8.1	7.3	7.4	7.4	6.9	6.7	6.4	5.8	6.6	6.3	5.7	
o)	Oncology	_	2.8	2.9	3.1	3.2	2.9	3.5	3.0	3.7	3.9	3.3	
p)	Patient education	2.2	2.1	2.7	1.7	1.6	2.2	2.0	1.5	2.2	2.0	1.6	
q)	Pediatrics	5.9	5.2	5.6	5.0	5.1	4.3	4.8	4.1	5.4	5.3	4.7	
r)	Perioperative	-	_	-	-	-	-	-	7.3%	8.2%	8.5%	8.2%	
s)	Psychiatric/mental health	3.1	3.6	3.2	3.7	3.8	3.4	4.0	3.7	3.7	4.1	3.6	
t)	Rehabilitation	_	_	_	_	_	_	2.2	2.2	2.8	2.9	2.7	

			Active only										
	2004	2005 a	2006	2007	2008	2009	2010 <sup>b</sup>	2011 <sup>c</sup>	2012	2013	2014		
Surgery	11.7%	11.4%	10.5%	12.5%	12.4%	11.3%	10.1%	_	-	_	-		
u) Women's health	_	_	_	_	_	_	_	1.0%	1.6%	1.8%	1.3%		
v) Other	18.2	12.9	7.4	16.2	16.6	18.3	2.3	9.5	11.7	12.0	9.7		

NOTES: a) "Geriatrics/elderly care" and "Oncology" were added as response options on the 2005 survey. b) "Anesthesia," "Cardiology/cardiac care," "Endoscopy," "Hospice," "Neonatal," and "Rehabilitation" were added as response options on the 2010 survey. c) On the 2011 survey instrument, "Med-Surg" was changed to "Medical-surgical"; "Surgery" was dropped; "Endoscopy" was changed to "Endoscopy/diagnostic testing"; "General/Family Practice" was changed to "Family practice"; "Internal medicine" was added; "Hospice" was changed to "Hospice/palliative care"; and "Perioperative" and "Women's health" were added. In 2011, to adjust for a coding error, online responses were not included in the analysis for this question.

#### 12. To assist us in projecting the supply of nurses in the future, please tell us how much longer you plan to practice nursing.

				Active Only											
Ye	ars	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014			
a)	1–5	13.1%	14.8%	13.2%	16.8%	17.7%	17.9%	19.5%	19.5%	19.2%	21.0%	21.1%			
b)	6–10	18.0	20.3	19.8	21.4	21.4	22.3	21.5	21.9	20.7	20.8	20.0			
c)	11–15	17.9	19.5	19.3	18.9	18.3	18.1	17.1	16.3	16.3	16.1	15.3			
d)	16–20	18.9	18.5	20.1	17.3	17.2	16.7	15.8	15.0	15.1	14.0	13.8			
e)	21–30	14.8	15.2	16.4	14.7	14.6	14.2	15.0	14.9	15.5	14.8	15.4			
f)	More than 30	5.1	5.4	5.5	5.8	6.2	7.0	7.3	8.5	9.4	9.5	10.8			
g)	Don't know	12.2	6.3	5.7	5.2	4.5	3.8	3.8	3.9	3.8	3.8	3.5			

#### 13. If you made a change in your employment position within the past three years was it to... (Mark all that apply.)

		Active	Only
		2013	2014
a) Ch	nange from an inpatient position to an outpatient position?	5.2%	5.0%
b) Ch	nange from an outpatient position to an inpatient position?	1.7	1.8
	nange from a primary care position (i.e., family practice, general medicine, internal medicine, general pediatrics) to a specialty care position?	2.4	2.3

<sup>\*\*</sup>In 2011, "med-surg" was changed to "medical-surgical." In previous surveys, the highest percentage of RNs identified "med-surg" as their main practice area. Differences in percentages between 2011 and 2013 may be due to confusion regarding the response option titled "medical-surgical."

		Active	e Only
		2013	2014
d) Change from a specialty care po	sition to a primary care position?	1.0%	1.2%
e) Make some other employment of	nange?	21.3	21.8

14. In your current position, are you a member of an interdisciplinary patient care team? (An interdisciplinary team includes at least two different types of health providers who work collaboratively with patients and their caregivers—to the extent preferred by each patient—to accomplish shared goals within and across settings to achieve coordinated, high-quality care.)

		Active O	nly				
		2013 2014					
a)	Yes	67.8%	64.4%				
b)	No	32.2	35.6				

15. If you are a member of an interdisciplinary patient care team, does your role on the interdisciplinary team include participation in... (Mark all that apply.)

		Active	Only
		2013	2014
a)	Discussion of team members' roles and responsibilities?	56.5%	53.6%
b)	Clinical discussions or "huddles" with the patient care team?	66.1	65.5
c)	Patient rounds with other members of the patient care team?	41.6	41.8
d)	Team meetings with patients and their families?	36.1	35.4
e)	Development of shared goals reflective of patient priorities and supported by all team members?	59.9	58.9
f)	Virtual communication with other team members through an electronic health record, email, or text messages?	51.6	49.6
g)	Evaluation of team processes and patient health outcomes?	55.6	53.7

16. Where is your primary place of employment? (Mark **one**.)

		Active Only										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		
a) Michigan	89.4%	87.9%	89.8%	88.7%	89.7%	89.7%	90.4%	90.9%	91.6%	91.2%		
b) Other state in the U.S.	9.4	11.4	9.1	10.0	9.0	9.2	8.5	8.2	7.4	7.8		
c) Canada	1.0	0.5	1.0	0.9	1.1	0.8	0.9	0.7	8.0	0.7		
d) Other nation	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3		

17. How long have you been employed as a practicing nurse?

	Active Only
	2014
a) Three years or less	14.2%
b) Four to five years	5.8
c) Six years or more	80.1

- 18. If you live in the U.S., or if your primary place of employment is in the U.S., what are the zip codes of your residence and primary place of employment?
- 19. In what year were you born? (Note: Response frequencies are for active nurses only. N = 13,354 in 2014.) Average age = 48.45.

				Active Only								
Age	•	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
a)	<25	1.4%	1.3%	1.6%	1.3%	1.7%	1.7%	1.5%	1.7%	3.2%	2.0%	2.3%
b)	25-34	18.9	15.9	18.4	13.2	12.8	12.8	12.5	13.7	14.5	13.6	15.2
c)	35-44	27.1	24.7	28.8	22.5	21.2	19.4	19.2	18.0	18.7	16.6	17.1
d)	45-54	35.2	36.6	32.8	35.7	33.6	33.1	31.1	30.1	29.6	27.6	26.2
e)	55-64	15.7	19.3	16.1	23.3	25.6	27.6	29.7	30.3	29.2	32.8	32.0
f)	65+	1.6	2.8	2.2	4.0	5.1	5.4	6.0	6.2	4.9	7.3	7.3

#### 20. What is your gender?

			Active Only										
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		
a) Female	92.2%	93.2%	92.1%	93.8%	94.0%	94.0%	93.9%	93.8%	93.5%	93.7%	93.3%		
b) Male	7.8	6.8	7.9	6.2	6.0	6.0	6.1	6.2	6.5	6.3	6.7		

### 21. Are you Spanish/Hispanic/Latino?

	Active Only										
	2006	2007	2008	2009	2010	2011	2012	2013	2014		
a) Yes	1.5%	1.3%	1.4%	1.3%	1.4%	1.4%	1.6%	1.4%	1.7%		
b) No	98.5	98.7	98.6	98.7	98.6	98.6	98.4	98.6	98.3		

### 22. What is your race/ethnicity?

				Active Only								
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
a)	White	87.7%	86.9%	86.0%	87.4%	87.7%	87.0%	87.6%	87.1%	88.5%	87.8%	89.1%
b)	Black or African American	5.5	6.0	7.6	6.2	5.6	5.8	5.3	5.7	5.0	5.6	4.9
c)	American Indian or Alaska Native	1.0	0.7	1.3	1.4	1.5	1.0	1.2	1.0	0.9	0.9	0.9
d)	Asian	3.4	4.0	3.3	3.9	4.3	4.1	3.9	4.0	3.4	3.4	3.1
e)	Native Hawaiian or Pacific Islander	3.4	4.0	3.3	3.9	4.3	4.1	3.9	0.2	0.2	0.2	0.2
f)	Middle Eastern (Arab, Chaldean, other)	_	_	0.3	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
g)	Multiracial	0.8	0.8	_	_	_	_	_	_	_	_	_
h)	Some other race/ethnicity	0.7	0.7	0.7	1.5	1.5	1.1	1.2	1.1	0.9	1.0	0.9

### Questions removed from the survey in 2013:

Did you graduate from a nursing school in the United States or in another nation?

			Active Only									
	2004	2005	2006	2007	2008	2009	2010	2011	2012			
a) United States	93.7%	92.8%	95.1%	93.4%	93.6%	93.7%	94.4%	94.4%	95.7%			
b) Other nation	6.3	7.2	4.9	6.6	6.4	6.3	5.6	5.6	4.3			

Have you voluntarily left a nursing position in the last two years?

			Percentage of all licensed RNs									
		2006	2007	2008	2009	2010	2011	2012				
a)	No	78.3%	78.5%	79.2%	80.2%	82.1%	79.2%	74.9%				
			Percentage of RNs who left a position									
b)	Yes, I took another nursing position in the <b>same</b> organization.	15.6%	18.0%	16.8%	18.2%	18.3%	21.2%	19.2%				
c)	Yes, I took another nursing position with a different organization.	56.1	57.4	57.5	56.4	53.1	44.3	40.4				
d)	Yes, I took a position outside of nursing.	8.3	6.8	6.2	5.4	5.2	4.8	4.3				
e)	Yes, I retired/quit nursing.	20.0	17.7	19.5	20.1	23.4	29.7	35.9				

NOTE: This question was consolidated in the 2011 survey. Data from previous surveys have been consolidated in the same way so the trend can be viewed.

If you answered "yes" to the question above, what were the factors that led to this decision? (Mark all that apply.)

		Percentage of RNs who left a position									
		2006	2007	2008	2009	2010	2011	2012			
a)	Age	12.6%	12.5%	13.9%	15.0%	16.0%	20.0%	27.2%			
b)	Employer/employee conflict	14.1	13.0	12.3	11.1	10.9	10.2	11.9			
c)	General lack of job satisfaction	40.3	43.0	41.3	38.5	37.5	25.1	26.2			
d)	Inadequate salary/wages/benefits	22.5	22.2	21.0	16.6	15.1	12.0	13.2			
e)	Increasing administrative burden	10.7	12.7	12.8	10.4	10.7	8.7	12.3			
f)	New career opportunity						32.9	29.1			
g)	Personal or family demands	29.8	27.7	27.1	26.6	26.1	21.4	21.6			
h)	Physical demands of the job	20.3	20.9	21.2	18.9	18.0	16.3	20.1			
i)	Relocation	_	_	_	_	_	10.0	10.9			
j)	Opportunity to work in nursing administration	3.2	3.9	3.9	3.7	4.0	_	_			
k)	Opportunity to work in nursing education	3.0	3.9	3.1	3.7	3.4	_	_			
I)	Career promotion	12.7	14.5	14.5	12.9	13.0	<u> </u>	_			
m)	Child bearing/child rearing	10.7	12.7	12.8	10.4	10.7	_	_			

NOTE: Nurses were asked to indicate all factors that led to their decision to leave a nursing position in the last two years, so the sum of the percentages will be more than 100 percent. In 2011, "Personal or family concerns" was changed to "Personal or family demands"; "Inadequate salary/wages" and "Inadequate benefits" were combined into one option; "Career promotion" was changed to "New career opportunity"; and "Relocation" was added as an option. Also in 2011, "Child bearing/child rearing," "Opportunity to work in nursing administration" and "Opportunity to work in nursing education" were removed as options.

#### Where do you live? (Mark one.)

					Active Only			
		2005	2007	2008	2009	2010	2011	2012
a)	Michigan	87.6%	88.6%	88.0%	89.0%	89.4%	89.9%	90.6%
b)	Other state	8.9	8.5	9.4	8.5	8.6	8.0	7.8
c)	Canada	3.3	2.7	2.2	2.3	1.7	1.9	1.4
d)	Other nation	0.2	0.1	0.4	0.2	0.2	0.1	0.2

NOTE: As a result of a mailing error, the responses to this question were not valid for 2006.

### **Appendix B:**

### LPN Response Frequencies 2004–2014<sup>3,4</sup>

For 2014 survey results, N=2,445

All nurses are required to renew their license every two years after receiving their first license, which results in two approximately equal cohorts of nurses. The cohort of nurses who renew their licenses in odd-numbered years is slightly older than the cohort who renew their licenses in even-numbered years. When looking at trends, survey responses that may be affected by age should be compared only to responses received from the *same* license renewal cohort in a previous survey. The same survey instrument was used for both RNs and LPNs. The following frequencies present the responses to survey questions that are pertinent for LPNs.

1. Are you a licensed practical nurse (LPN), a registered nurse (RN), or both? (Mark **one.** If you are both an LPN and an RN, complete and return only one survey.)

Note: This question was used only to identify respondents as RNs or LPNs and to determine the proportion of RNs who also hold a diploma/certificate as a LPN.

2. Do you hold a Michigan specialty certification as a... 1) Nurse anesthetist, 2) Nurse midwife, 3) Nurse practitioner

Note: This question is not applicable.

If you are practicing as an advanced practice registered nurse, do you have a Drug Enforcement Agency (DEA) number?

Note: This question is not applicable.

If you are practicing as an advanced practice registered nurse, do you have a National Provider Identifier (NPI) number?

Note: This question is not applicable.

<sup>&</sup>lt;sup>3</sup> Data for 2004–2012 are from the annual *Michigan Center for Nursing Survey of Nurses*.

<sup>&</sup>lt;sup>4</sup> Frequencies reported may not equal 100 percent due to rounding.

3. If you hold a specialty certification listed above, on average, how many hours per week do you provide direct patient care as an advanced practice registered nurse?

Note: This question is not applicable.

4. What is your education background? (Mark **all** that apply.)

		Active Only									
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
a)	LPN diploma/ certificate of nursing	78.7%	97.3%	97.1%	97.4%	96.3%	96.9%	96.9%	96.4%	97.2%	96.6%
	LPN certificate of achievement	22.7	_	_	_	_	_	_	_	_	_
b)	RN diploma in nursing	0.7	0.7	0.9	8.0	0.8	0.7	1.1	0.9	1.0	0.7
c)	Associate's degree in nursing	3.5	3.8	3.9	3.4	4.2	3.5	4.2	4.3	4.1	4.4
d)	Bachelor's degree in nursing	1.0	1.0	0.9	1.1	1.1	1.2	1.0	1.1	1.2	1.4
e)	Master's degree in nursing	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
f)	Master's degree in other field	_	0.4	0.5	0.5	0.5	0.4	0.4	0.7	0.7	0.7
g)	Doctorate in nursing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
h)	Doctorate in other field	_	_	_	0.1	0.1	0.2	0.0	0.2	0.1	0.2
i)	Other degree	5.5	7.1	7.5	8.3	6.7	6.4	7.3	7.8	8.1	9.2

NOTE: On the 2004 survey, LPNs were not asked for their education background. On the 2005 survey, "Diploma in nursing" was replaced as a response option by "LPN diploma in nursing," "LPN certificate of achievement," and "RN diploma in nursing." On the 2006 survey, "LPN diploma in nursing" and "LPN certificate of achievement" were combined as one response option.

5. If you have a doctorate in nursing, please indicate the type of doctorate degree. (Mark all that apply.)

Note: This question is not applicable.

6. Are you currently enrolled in a program to obtain a...

		Active Only								
	2009	2010	2011	2012	2013	2014				
a) Bachelor of Science in Nursing (BSN)	2.6%	2.3%	2.1%	1.5%	2.4%	2.4%				
b) Master of Science in Nursing (MSN)	0.1	0.1	0.0	0.0	0.0	0.1				
c) Doctor of Nursing Practice (DNP)	_	<del>-</del>	n/a	n/a	n/a	n/a				
d) Doctor of Philosophy in Nursing (PhD)	_	<del>_</del>	n/a	n/a	n/a	n/a				

NOTE: This question was consolidated, and "Doctor of Nursing Practice" and "Doctor of Philosophy in Nursing" were added as choices in the 2011 survey. Data from previous surveys has been consolidated in the same way so the trend can be viewed.

- 7. If you are enrolled in a program to obtain an MSN, is the program designed to prepare you for specialty certification as a nurse practitioner? *Note: This question is not applicable.*
- 8. What is your current employment status? (Mark **one**.)

		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
a)	35 or more hours per week in nursing or related area	56.7%	55.0%	57.4%	54.3%	54.3%	51.6%	50.2%	49.2%	50.7%	48.5%	45.9%
b)	30 to 34 hours per week in nursing or related area	_	_	_	_	_	_	_	_	_	_	11.5
c)	Less than 30 hours per week in nursing or related area	_	_	_	_	_	_	_	_	_	_	17.0
	Less than 35 hours per week in nursing or related area	24.8	26.3	23.8	26.2	25.2	25.5	24.6	24.4	25.2	24.5	_
d)	Employed, but not in nursing	5.4	4.8	4.9	4.3	4.8	4.6	4.7	4.6	4.4	4.9	4.2
e)	Not employed, and seeking employment in nursing or related area	3.3	2.9	3.1	3.2	3.3	4.2	6.2	5.9	6.6	6.3	5.5
f)	Not employed, and seeking employment outside of nursing	0.1	0.2	0.4	0.3	0.3	0.5	0.5	0.5	0.3	0.4	0.5
g)	Temporarily not working and not looking for a job	5.0	5.8	6.1	5.6	5.6	6.5	6.5	7.2	5.9	7.5	6.8
h)	Retired or with no plans to return to work	4.7%	5.0%	4.2%	6.0%	6.4%	7.0%	7.4%	8.3%	6.9%	8.0%	8.6%

#### 9. Identify your current employment setting(s). (Mark **all** that apply.)

		Active Only									
<u></u>	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
a) Hospital inpatient	19.3%	21.0%	18.4%	18.0%	17.8%	15.5%	13.9%	13.4%	10.9%	13.0%	10.8%
b) Hospital outpatient	4.8	5.9	5.7	6.2	5.4	5.7	5.3	5.8	5.6	7.4	5.9
c) Nonhospital outpatient	2.1	2.8	2.9	2.7	2.6	2.7	2.8	2.5	2.4	2.9	3.2
d) Physician's office	12.1	17.0	16.4	17.0	18.0	18.7	19.1	17.8	20.6	20.1	19.0
e) Federally qualified health center	_	_	_	_	_	_	_	2.2	1.8	2.6	1.9
f) Retail clinic	_	_	_	_			_	0.2	0.2	0.2	0.2
g) Nurse-managed clinic	_	_	_	_	_	_	_	0.5	0.6	0.5	0.8
h) Correctional system	_	_	_	_	_	_	_	1.4	1.2	1.3	1.6
<ul> <li>i) Nursing home/long-term care facility</li> </ul>	35.0	44.0	46.9	44.5	44.6	44.1	45.1	44.7	43.1	39.2	40.7
j) Home health care	9.8	11.0	12.4	11.9	11.8	12.4	14.1	13.7	13.7	15.9	15.6
k) Hospice	2.1	2.3	2.0	2.9	2.6	2.4	2.7	2.5	2.8	3.2	3.6
<ol> <li>Public/community health</li> </ol>	2.0	2.6	2.4	2.3	2.2	2.1	1.1	1.3	1.7	1.6	1.9
School health	1.6	1.2	0.9	1.2	0.9	1.3	1.4	_	_	_	_
m) Elementary or secondary school health	_	_	_	_	_	_	_	0.9	1.0	1.3	1.0
n) College health center	_	_	_	_	_	_	_	0.1	0.2	0.1	0.2
o) Nursing education	1.8	1.6	1.5	1.5	1.3	1.2	1.3	1.0	1.0	0.9	1.6
p) Insurance company/health plan	1.0	0.8	0.9	0.7	0.8	0.7	0.9	0.7	1.1	0.6	1.2
q) Traveling/staffing agency	1.3	1.9	2.4	1.6	1.4	1.1	1.1	0.9	0.7	0.9	0.7
r) Other	8.4	7.0	6.7	7.1	7.2	7.5	6.5	5.7	6.7	7.1	7.8
s) None (not active in nursing)	7.3	0.4	0.4	0.4	0.3	0.2	0.3	0.1	0.1	0.0	0.2

NOTE: Nurses were asked to indicate all of their current employment settings, so the sum of the percentages will be more than 100 percent. "Federal qualified health center," "Correctional system," "Nurse-managed clinic," and "Retail clinic" were added as settings in the 2011 survey. Also in 2011, "School health" was separated into two setting options: "Elementary or secondary school health" and "College health center."

10. Does your main nursing position involve providing direct care services to patients/families?

			Active Only								
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
a) Yes	82.4%	91.5%	92.3%	91.3%	91.0%	90.6%	90.0%	91.0%	90.2%	90.1%	89.2%
b) No	17.6	8.5	7.7	8.7	9.0	9.4	10.0	9.0	9.8	9.9	10.8

11. If you provide direct care services, please identify your main practice area. (Mark one.)

			Active only									
		2004	2005ª	2006	2007	2008	2009	2010 <sup>b</sup>	2011°	2012	2013	2014
a)	Anesthesia	_	_	_	_	_	_	_	0.1%	0.2%	0.1%	0.0%
b)	Cardiology/ cardiac care	_	_	_	_	_	_	_	2.1	1.1	1.9	1.3
c)	Case management	2.8	3.8	7.0	8.0	0.4	1.6	1.1	0.8	0.8	1.1	0.9
d)	Critical care	3.1	1.9	1.9	1.8	1.6	1.4	0.7	0.7	0.8	0.5	0.9
e)	Dialysis/hemodialysis	_	_	_	_	_	_	0.7	0.6	0.5	0.5	0.3
f)	Emergency/urgent care	2.6	2.2	2.2	2.0	2.1	1.8	1.9	1.5	1.6	1.2	0.8
g)	Endoscopy/diagnostic testing	_	_	_	_	_	_	1.1	1.2	1.3	1.4	8.0
h)	General/Family practice	13.8	6.7	5.3	8.6	7.7	10.4	10.8	9.1	8.1	9.4	8.8
i)	Geriatrics/elderly care	_	45.4	47.4	48.0	47.8	47.2	48.5	45.5	43.3	41.4	42.6
j)	Hospice/palliative care	_	_	_	_	_	_	2.0	1.6	2.3	2.4	2.1
k)	Internal medicine	_		_	_	_	_	_	1.9	2.7	2.2	2.4
I)	Medical-surgical	24.4	11.1	11.2	9.7	10.3	8.1	6.5	6.6	1.3	1.6	5.8
m)	Neonatal	_	_	_	_	_	_	0.2	0.3	0.2	0.1	0.1
n)	Obstetrics	_	_	_	_	_	_	1.1	1.8	1.4	1.6	2.3
o)	Oncology	_	0.9	0.6	0.9	8.0	0.6	8.0	0.6	0.7	0.7	0.5
p)	Patient education	5.2	2.5	3.6	1.1	1.3	2.3	2.1	1.4	2.6	2.3	1.3
q)	Pediatrics	7.3	4.4	4.7	4.6	5.2	4.7	6.8	4.7	6.4	7.3	6.7
r)	Perioperative	<u> </u>	_	_	_	_	_	_	0.8	1.0	0.9	0.7
s)	Psychiatric/mental health	4.6	2.9	2.4	2.6	2.5	2.6	2.7	2.4	2.7	2.4	2.7

				Active only								
		2004	2005ª	2006	2007	2008	2009	2010 <sup>b</sup>	2011°	2012	2013	2014
t)	Rehabilitation	_	_	_	_	_	_	_	2.8%	5.4%	4.9%	4.3%
	Surgery	3.0%	2.8%	2.7%	3.0%	3.0%	3.0%	2.5%	_	_	_	_
u)	Women's health	_	_	_	_	_	_	_	0.8	1.6	1.9	1.3
v)	Other	29.8	11.6	8.6	13.7	14.3	13.7	1.9	12.9	14.1	14.1	13.4

NOTES: a) "Geriatrics/elderly care" and "Oncology" were added as response options on the 2005 survey. b) "Anesthesia," "Cardiology/cardiac care," "Endoscopy," "Hospice," "Neonatal," and "Rehabilitation" were added as response options on the 2010 survey. c) On the 2011 survey instrument, "Med-Surg" was changed to "Medical-Surgery"; "Surgery" was dropped; "Endoscopy" was changed to "Endoscopy/diagnostic testing"; "General/Family practice" was changed to "Family practice"; "Internal medicine" was added; "Hospice" was changed to "Hospice/palliative care"; and "Perioperative" and "Women's health" were added. In 2011, to adjust for a coding error, online responses were not included in the analysis for this question.

#### 12. To assist us in projecting the supply of nurses in the future, please tell us how much longer you plan to practice nursing.

				Active Only								
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
a)	1–5 years	14.4%	16.7%	17.2%	18.7%	20.8%	20.9%	22.6%	23.9%	21.6%	24.8%	21.2%
b)	6-10 years	18.2	21.3	21.7	21.9	20.6	22.4	21.9	21.2	19.9	19.8	21.2
c)	11–15 years	14.1	17.4	17.2	15.9	15.8	14.5	14.7	13.4	14.5	13.6	12.6
d)	16-20 years	15.7	16.0	16.1	15.0	14.0	13.4	12.5	12.3	12.3	11.7	12.4
e)	21–30 years	13.5	12.7	13.4	12.5	13.2	12.7	13.2	12.5	15.4	13.0	13.0
f)	More than 30 years	7.8	7.7	7.4	8.3	8.2	8.9	9.3	10.4	9.7	10.3	11.8
g)	Don't know	16.3	8.2	6.9	7.7	7.4	7.1	5.9	6.3	6.6	6.9	7.8

13. If you made a change in your employment position within the past 3 years was it to...(Mark all that apply.)

		Active	Only
		2013	2014
a)	Change from an inpatient position to an outpatient position?	3.4%	3.4%
b)	Change from an outpatient position to an inpatient position?	1.4	0.6
c)	Change from a primary care position (i.e., family practice, general medicine, internal medicine, or general pediatrics) to a specialty care position?	2.6	3.0
d)	Change from a specialty care position to a primary care position?	1.4	1.9
e)	Make some other employment change?	20.5	22.0

14. In your current position, are you a member of an interdisciplinary patient care team? (An interdisciplinary team includes at least two different types of health providers who work collaboratively with patients and their caregivers—to the extent preferred by each patient—to accomplish shared goals within and across settings to achieve coordinated, high-quality care.)

	Activ	e Only
	2013	2014
a) Yes	55.0%	52.5%
b) No	45.0	47.5

15. If you are a member of an interdisciplinary patient care team, does your role on the interdisciplinary team include participation in... (Mark all that apply.)

		Active	e Only
		2013	2014
a)	Discussion of team members' roles and responsibilities?	51.7%	46.7%
b)	Clinical discussions or "huddles" with the patient care team?	48.2	48.2
c)	Patient rounds with other members of the patient care team?	33.0	36.0
d)	Team meetings with patients and their families?	33.1	37.1
e)	Development of shared goals reflective of patient priorities and supported by all team members?	51.1	50.2
f)	Virtual communication with other team members through an electronic health record, e-mail, or text messages?	36.9	37.7
g)	Evaluation of team processes and patient health outcomes?	43.9	40.7

16. Where is your primary place of employment? (Mark one.)

		Active Only										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		
a) Michigan	95.0%	94.4%	94.4%	94.6%	94.8%	94.7%	95.5%	95.1%	95.9%	95.1%		
b) Other state in the U.S.	4.9	5.4	5.3	5.3	5.0	5.1	4.4	4.7	3.9	4.5		
c) Canada	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2		
d) Other nation	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.2		

17. How long have you been employed as a practicing nurse?

	Active Only
	2014
a) Three years or less	18.3%
b) Four to five years	7.3
c) Six years or more	74.4

- 18. If you live in the U.S. or if your primary place of employment is in the U.S., what are the zip codes of your residence and primary place of employment?
- 19. In what year were you born? (Note: Response frequencies are for active nurses only. N = 1,723 in 2014.) Average age = 50.93.

							Activ	e Only				
Age	е	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
a)	<25	2.0%	5.0%	2.4%	2.1%	2.0%	1.9%	2.6%	1.7%	2.2%	1.8%	2.2%
b)	25-34	18.0	9.2	16.2	11.2	11.2	11.3	10.8	11.3	12.3	11.5	11.3
c)	35–44	24.2	20.6	23.5	18.0	17.0	15.9	15.8	15.1	18.2	15.2	16.8
d)	45–54	31.3	35.7	33.1	33.9	30.6	30.4	28.2	27.8	26.3	24.4	24.1
e)	55–64	22.0	24.9	20.9	28.7	31.7	32.4	34.5	35.1	34.1	36.2	36.2
f)	65+	2.4	4.6	3.9	6.1	7.5	8.1	8.1	9.0	6.9	11.1	9.4

### 20. What is your gender?

			Active Only										
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		
a) Fema	le 94.2%	95.4%	95.6%	94.9%	95.5%	95.2%	95.6%	95.4%	95.1%	94.8%	94.5%		
b) Male	5.8	4.6	4.4	5.1	4.5	4.8	4.4	4.6	4.9	5.2	5.5		

### 21. Are you Spanish/Hispanic/Latino?

		Active Only									
	2006	2007	2008	2009	2010	2011	2012	2013	2014		
a) Yes	2.1%	1.6%	1.6%	1.5%	1.4%	1.7%	2.0%	2.3%	1.7%		
b) No	97.9	98.4	98.4	98.5	98.6	98.3	98.0	97.7	98.3		

#### 22. What is your race/ethnicity?

							Active	Only				
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
a)	White	80.5%	81.4%	77.3%	82.2%	82.8%	82.8%	81.4%	81.8%	82.1%	80.2%	80.3%
b)	Black or African American	14.2	13.3	17.8	13.5	12.9	12.2	13.2	13.4	12.8	14.7	13.4
c)	American Indian or Alaska Native	1.6	1.1	2.7	2.4	2.2	1.8	1.7	1.4	1.1	1.3	1.5
d)	Asian	1.5	1.7	1.4	1.7	2.0	2.0	2.0	1.9	1.9	1.9	2.2
e)	Native Hawaiian or Pacific Islander	_	_	_	_	_	_	_	0.2	0.1	0.2	0.1
f)	Middle Eastern (Arab, Chaldean, Other)	_	_	_	_	_	_	_	0.2	0.0	0.1	0.0
g)	Multiracial	0.9	0.8	_	_	_	_	_	_	_	_	_
h)	Some other race/ethnicity	0.4	0.6	1.0	1.8	1.7	1.3	1.2	1.0	1.4	1.4	1.5

#### Questions removed from the survey in 2013:

Did you graduate from a nursing school in the United States or in another nation?

				Active Only									
		2004	2005	2006	2007	2008	2009	2010	2011	2012			
a)	United States	98.6%	98.4%	98.7%	98.2%	98.3%	98.1%	97.9%	98.4%	98.1%			
b)	Other nation	1.4	1.6	1.3	1.8	1.7	1.9	2.1	1.6	1.9			

Have you voluntarily left a nursing position in the past two years? (Mark one.)

			Percent	age of all licen	sed LPNs		
	2006	2007	2008	2009	2010	2011	2012
a) No	78.6%	79.1%	78.7%	79.8%	81.5%	78.5%	75.9%
		Pe	rcentage of all	licensed LPNs	who left a pos	ition	
b) Yes, I took another nursing position in the <b>same</b> organization.	6.4	6.9	6.3	6.2	5.9	10.0	10.1
c) Yes, I took another nursing position with a <b>different</b> organization.	61.4	63.7	63.2	59.8	57.2	42.5	35.8
d) Yes, I took a position outside of nursing.	10.9	9.1	7.8	7.7	8.3	9.4	6.7
e) Yes, I retired/quit nursing.	21.4	20.3	22.6	26.2	28.5	38.1	47.5

NOTE: This question was consolidated in the 2011 Survey. Data from previous surveys has been consolidated in the same way so the trend can be viewed.

If you answered "yes" to the question above, what were the factors that led to this decision? (Mark all that apply.)

				% of all	LPNs who left a	position		
		2006	2007	2008	2009	2010	2011	2012
a)	Age	12.7%	11.7%	17.1%	16.7%	19.9%	24.9%	34.6%
b)	Employer/employee conflict	15.7	15.0	14.4	13.3	12.2	11.1	13.4
c)	General lack of job satisfaction	38.6	38.6	36.9	36.6	35.1	20.7	17.9
d)	Inadequate salary/wages/benefits	26.0	26.3	24.6	19.3	17.4	14.9	9.5
e)	Increasing administrative burden	10.5	12.8	12.5	10.5	10.1	6.6	9.5
f)	New career opportunity	<u>—</u>	_	<u> </u>	<u> </u>	_	20.3	17.9
g)	Personal or family demands	32.1	28.8	28.2	26.9	25.5	23.8	17.9
h)	Physical demands of the job	22.7	23.0	21.3	21.7	20.0	16.6	25.7
i)	Relocation	_	_	_	_	_	10.7	13.4
j)	Opportunity to work in nursing administration	1.8	2.2	2.1	2.0	2.2	<del>_</del>	_
k)	Opportunity to work in nursing education	1.9	1.1	1.3	1.1	0.6	<del>_</del>	_
l)	Career promotion	9.9	7.8	8.6	8.4	7.8	<u> </u>	
m)	Child bearing/child rearing	5.4	5.4	4.2	3.8	4.2	_	_

NOTE: Nurses were asked to indicate all factors that led to their decision to leave a nursing position in the last two years, so the sum of the percentages will be more than 100 percent. In 2011, "Personal or family concerns" was changed to "Personal or family demands"; "Inadequate salary/wages" and "Inadequate benefits" were combined into one option; "Career promotion" was changed to "New career opportunity"; and "Relocation" was added as an option. Also in 2011, "Childbearing/childrearing," "Opportunity to work in nursing administration" and "Opportunity to work in nursing education" were removed as options.

#### Where do you live? (Mark one.)

				Active	Only					
	2005	2005 2006 2007 2008 2009 2010 2011								
a) Michigan	95.5%	94.7%	95.0%	94.8%	95.3%	94.7%	96.0%	95.3%		
b) Other state	4.3	5.1	4.7	5.0	4.5	5.1	3.9	4.5		
c) Canada	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1		
d) Other nation	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0		